

Aspirin, Vitamin E No Help Against Cancer



July 5, 2005 08:41:31 PM PST

By Amanda Gardner

HealthDay Reporter

TUESDAY, July 5 (HealthDay News) -- The largest women's study to date on low-dose aspirin and vitamin E delivers bad news on two fronts: Neither helped prevent most types of cancers, and vitamin E had precious little effect on cardiovascular disease.

The Boston researchers provided glimpses of hope, however, including the possibility that low-dose aspirin might have an effect on the development of lung cancer and the finding that vitamin E slightly reduced mortality from cardiovascular causes.

It was also not clear if higher doses of aspirin might have a more salutary effect, said the scientists, who reported their findings from the Women's Health Study (WHS) in the July 6 issue of the *Journal of the American Medical Association*.

"Unfortunately, we're back to the recommendations that you really have to change your diet and not take a supplement, or at least [not] a supplement of vitamin E, to stay up with what we know about modifying risk factors," said Julie Buring, principal investigator of the WHS and deputy director of the division of preventive medicine at Brigham and Women's Hospital in Boston. "Many people would rather pop a pill than change their lifestyle, but it's back to the lifestyle."

One nice thing about the trial, Buring noted, is that the results pertain specifically to women.

Previous, albeit less rigorous research, had suggested that aspirin might help prevent cancer, particularly colon cancer. It was also thought that vitamin E, which has antioxidant properties, might be able to correct damage from free radical molecules that are thought to help drive a host of diseases. According to the 1999-2000 National Health and Nutrition Examination Survey, about 13.5 percent of U.S. women take vitamin E supplements, despite the lack of clear proof of efficacy.

The WHS researchers followed nearly 40,000 healthy female health professionals aged 45 or older for a little over 10 years. Broken into two research arms, the women were randomly assigned to either take vitamin E (600 IU every other day) or a placebo, or aspirin (100 milligrams every other day) or a placebo.

Previous findings from the WHS, reported in the *New England Journal of Medicine* in March, found that low-dose aspirin reduced the risk of stroke by 17 percent but had no effect on heart attacks or cardiovascular deaths. However, in women over 65, aspirin reduced the risk of developing cardiovascular disease, ischemic stroke and heart attack. These are additional findings from that study.

The researchers found no statistically significant difference in the incidence of breast, colorectal and lung cancer between the aspirin and placebo groups, although the lung cancer group showed a "marginally statistically significant reduction in risk."

"While our study isn't definitive for lung cancer, there is other data that shows some support, and it's worth looking into," said Nancy Cook, lead investigator of the aspirin research and a statistician with the division of preventive medicine at Brigham and Women's Hospital in Boston.

Cook also said they can't rule out the possibility that there might be an effect at a higher dose. "Cancer is thought to work on the cox-2 enzyme, and this dose may not be large enough to have an effect there," she explained.

While vitamin E had no overall effect on cardiovascular disease or cancer, it was associated with reductions in cardiovascular deaths, as well as overall cardiovascular disease (by 26 percent), in women aged 65 years and older.

"The vitamin E story has some promise to it," said Dr. Eileen Hoffman, a clinical associate professor of medicine at New York University School of Medicine in New York City. "I think the critical element is picking out those women who would be more likely to benefit from vitamin E."

"We did find a little reduction of dying from cardiovascular disease, but that's a little unexpected," Buring added. "It's one of those things you tuck away in your mind, but I wouldn't make a recommendation based on that."

Also, the fact that vitamin E didn't worsen matters is a boon to some. "We saw very clearly that there is no harm," Buring said. "That's an important message, that people can make their own decision."

"Maybe 70 percent of the people I see are taking things, and we have no idea if they're good for them or bad for them or make no difference, although I know it's costing patients money," said Dr. Jay Brooks, chairman of hematology/oncology at the Ochsner Clinic Foundation in New Orleans. "In this study, we clearly know that taking these agents for preventing cancer and cardiovascular disease didn't work, so if a person asks me if they should be taking these to prevent them from getting cancer, I have an answer."

More information

For more on women and heart disease, visit [The Heart Truth](#), a program of the National Heart, Lung, and Blood Institute